CPAM 2005-0003 COMPREHENSIVE PLAN AMENDMENT FOR THE UPPER BROAD RUN AND UPPER FOLEY TRANSITION SUBAREAS

Information Question— To what extent do existing environmental and historical resources impact future growth potential in the Upper Broad Run and Upper Foley Subareas?

Prepared: July 25, 2005

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(1 of 5)

A. General Demographics and Land Area Data

The Upper Broad Run and Upper Foley subareas contain approximately 9,221 acres and 674 parcels or portions of parcels¹ (*see Table 1*). The Upper Broad Run subarea is the larger of the two subareas and is comprised of approximately 6,383 acres and 607 parcels or portions of parcels. Its northern, western, and southern edges are a watershed boundary, and its eastern edge is marked by the 65 Ldn noise contours. The Upper Foley subarea comprises approximately 2,838 acres and 91 parcels or portions of parcels. Its northern boundary is formed by a watershed and its western edge is the Bull Run stream and the Loudoun County/Prince William County boundary. There are 24 parcels that are located within both the Upper Broad Run and Upper Foley subareas.

Table 1. Acreage and Number of Parcels or Portions of Parcels

	Acreage	Parcels*
Upper Broad Run subarea	6,383	607
Upper Foley subarea	2,838	91
Total	9,221 acres	674 parcels

^{*} The parcel numbers do not add up because 24 parcels are split between the Upper Broad Run and Upper Foley subareas. They are therefore counted in both subareas.

The average parcel size in the two subareas is approximately 17 acres (*see Table 2*). The largest parcel on record consists of 800 acres, 773 of which contained within the Upper Broad Run subarea. There are currently 398 structures within the Upper Broad Run and Upper Foley subareas assessed for greater than \$20,000. The current population for the two subareas is estimated at 1,234 persons².

¹ The boundaries for the Upper Broad Run and Upper Foley subareas are based on watersheds, not parcels. This analysis included all the parcels that are either entirely or partly contained within the subareas.

² Population estimates based on the number of structures assessed for greater than \$20,000 multiplied by 3.1 persons/household, the average for single family detached houses in Loudoun County.

Table 2. Parcel Size in Upper Broad Run and Upper Foley subareas*

Acreage	Parcels		
Greater than 500	2		
200.0 to 499.99	4		
100.0 to 199.99	13		
50.0 to 99.99	20		
25.0 to 49.99	34		
10.0 to 24.99	82		
5.0 to 9.99	65		
2.0 to 4.99	78		
1.0 to 1.99	68		
Less than 0.99	308		
Total	674		

^{*} Includes the portions of parcels that are split between different policy areas. There are 24 parcels split between the Upper Broad Run and Upper Foley subareas.

B. Green Infrastructure

Environmental Resources

Several stream valleys are present within the Upper Broad Run and Upper Foley subareas, including three forks of Broad Run (Upper Broad Run, Lenah Run, and South Fork Broad Run) and several tributaries that drain to Bull Run.

The subareas are located in two different watersheds (see Attachment 1: Major and Sub-Watersheds Map). The Upper Broad Run subarea is located within the Broad Run Watershed and ultimately drains into the Potomac River. The Upper Foley subarea is located within the Bull Run Watershed, one of the two principal sub-basins that forms the Occoquan Watershed. The Occoquan Reservoir, located between Fairfax and Prince William Counties, is a major source of drinking water for more than a million people living in Northern Virginia. Approximately 600 acres, or 6.5 percent of the total land area, within the two subareas contains major or minor floodplain (see Attachment 2: Green Infrastructure Map). In addition, steep and moderately steep slopes are present within the two subareas, primarily within or adjacent to the stream valleys.

Areas of significant forest cover remain within the Upper Broad Run and Upper Foley subareas. Approximately 3,300 acres, or 36 percent of the total land area, in the two subareas is forested, with the remainder in agricultural, residential, or non-residential use.

The two subareas also contain concentrations of diabase rock that is actively quarried in parts of the County and used for road and building construction (*see Attachment 3: Diabase Soils Map*). The two subareas contain limited prime agricultural soils that are generally located along the Route 621 corridor and the "finger" tributaries of the Broad Run. Much of the Upper Foley subarea also contains soils that present problems for the construction of foundations and basements due to shrink-swell clays, shallow depth to rock requiring blasting, and perched water.

Heritage Resources

The Upper Broad Run and Upper Foley subareas contain both known and potential heritage resources. There are approximately 67 surveyed historic structures and 27 identified archaeological sites in the two subareas (see Attachment 4: Historic and Archaeological Resources Map; Attachment 9: Surveyed Architectural Resources Table; and Attachment 10: Surveyed Archaeological Resources Tables). In addition, the historic settlement of Lenah is within the Upper Broad Run subarea at the intersection of Route 50 and Lenah Farm Lane. No historic districts have been designated in the two subareas.

Many historic road segments lie within the two subareas that were important to the Native American and Colonial Loudoun transportation network. Portions of Evergreen Mill Road (Route 621) were once part of the Old Carolina Road, perhaps the most well-used Colonial, north-south right of way through the County. Historians have also touted the Carolina Road as having originally functioned as a north-south migration route for Native Americans. Native Americans also followed the buffalo along what is now Route 50 (John S. Mosby Highway). Route 50 and Braddock Road in Colonial times were also significant east-west corridors linking Alexandria to Winchester. Both subareas are located within the Mosby Heritage Area, which was designated in 1995 to increase knowledge and appreciation of the area's rich historic and natural qualities. The Mosby Heritage Area encompasses all, or a portion, of the counties of Loudoun, Fauquier, Prince William, Warren, Clarke and Rappahannock in Virginia as well as a portion of Jefferson County, West Virginia.

There is a high potential for archaeological sites in the two subareas. The stream valleys and historic roadways are particularly sensitive areas. Due to the vast water resources represented by Broad Run and Bull Run, there is a high probability for archaeological sites related to Native American use and settlement in the area.

Airport Noise Contours

Much of the Upper Broad Run subarea is located within the Ldn 60 and Ldn 60 1-mile buffer noise contours of the Washington Dulles International Airport (*see Attachment 5: Airport Noise Contours*). Its eastern edge is marked by the 65 Ldn noise contours. In addition, a small part of the Upper Foley subarea is located within the Ldn 60 1-mile buffer noise contour.

C. Existing Land Uses

Much of the Upper Broad Run and Upper Foley subareas exist as a rural, low-density residential and agricultural area (*see Table 3 and Attachment 6: Existing Uses*). Two residential communities have developed in this area, including Lenah Run and the Marches. Lenah Run consists of 256 single family detached houses and has been developed in a cluster pattern with almost half of the total acreage preserved as open space. The average lot size in Lenah Run is approximately half an acre. The Marches consists of 32 single family detached houses on approximately 1 to 2+ acre lots.

The non-residential uses in the two subareas include two churches, Arcola Elementary School, and a limited number of businesses. There are seven parcels in both subareas that have open space easements on them, six of which are located in the Lenah Run development (see Attachment 7: Open Space Easements).

Table 3. Existing Land Uses

-	Acreage	Percent
Agricultural	6,621.5	72%
Residential	1,127.4	12%
Commercial/Industrial	12.3	0.1%
Civic	20.2	0.2%
Vacant	1,439.8	16%
Total	9,221.2	100%

D. Major Projects

There is currently one by-right project within the Upper Foley subarea that is inactive and three rezoning applications (see Table 4 and Attachment 8: Pending Projects). The three active rezoning applications are located within both the Transition Policy Area and the Suburban Policy area along the Route 659 Relocated alignment. In addition to these four pending applications, one rezoning (ZMAP 2003-0012, Braddock Crossing) was approved by the Board of Supervisors on June 21, 2005.

Table 4. Summary Statistics of Major Projects

Application Number	Application Name	Status	Proposed Units	Acreage	Density (units/acre)
SBRD 2004-0037	Rosspriory Estates	Inactive	21 SFD	83	0.25
ZMAP 2002-0001	Kirkpatrick West	Active	334 units (226 SFD & 108 SFA)	170*	1.96
ZMAP 2002-0003	CD Smith	Active	348 units (131 SFD & 217 SFA)	101**	3.46
ZMAP 2002-0013	Stone Ridge	Active	689 units (227 SFD, 156 SFA, & 306 MF)	271***	2.54
ZMAP 2003-0012	Braddock Crossing	Approved	200 units (58 SFD & 142 SFA)	59****	3.38

^{*} Approximately 26 acres are located in the Transition Policy Area, Upper Foley subarea with the remainder in the Transition Policy Area, Lower Foley subarea.

^{**} Approximately 46 acres are located in the Transition Policy Area, Upper Broad Run and Upper Foley subareas with the remainder in the Suburban Policy Area.

^{***} Approximately 99 acres are located in the Transition Policy Area, Upper Broad Run subarea with the remainder in the Suburban Policy Area.

^{****} Approximately 41 acres are located in the Transition Policy Area, Upper Foley subarea with the remainder in the Suburban Policy Area..

E. Neighboring Jurisdictions

Prince William County lies directly to the south of the Upper Foley subarea and the Bull Run stream. This jurisdiction has planned for the portion adjacent to Loudoun County to be a rural area designated Agricultural and Estate with a maximum density of one dwelling unit per 10 acres. Large-lot residential clusters that preserve large tracts of permanent open space is an alternative development pattern. This rural designation is intended to preserve the County's agricultural economy and resources, quality of the groundwater supply, and existing open space and rural character. Although the Rural Area can be served by public water facilities, it is not intended to be served by public sewer facilities except under emergency conditions.

Although Fairfax County is not directly adjacent to the two subareas (*see Figure 1*), the southwestern portion of the County is within the same watershed (the Occoquan) as the Upper Foley subarea. The portion of this jurisdiction adjacent to Loudoun County is planned as a low density residential area for the purpose of protecting water quality in the Occoquan Reservoir. The area is planned for residential densities at 1 dwelling unit per 10 acres or 1 dwelling unit per 5 acres and for public parkland. Current zoning is identified as R-C (Residential – Conservation) with a density of one dwelling unit per five acres. Clustering is permitted allowing minimum lot sizes of 36,000 square feet as long as a minimum of 50% of the gross land area is preserved as open space.

Upper Broad Run subarea
Upper Foley subarea

Upper Foley subarea

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Figure 1. Loudoun County and Surrounding Jurisdictions